

(19)



JAPANESE PATENT OFFICE

PATENT ABSTRACTS OF JAPAN

.. (11) Publication number: 07252631 A

(43) Date of publication of application: 03.10.95

(51) Int. Cl

C23C 8/18

(21) Application number: 06046133

(71) Applicant: OMI TADAHIRO

(22) Date of filing: 16.03.94

(72) Inventor: OMI TADAHIRO

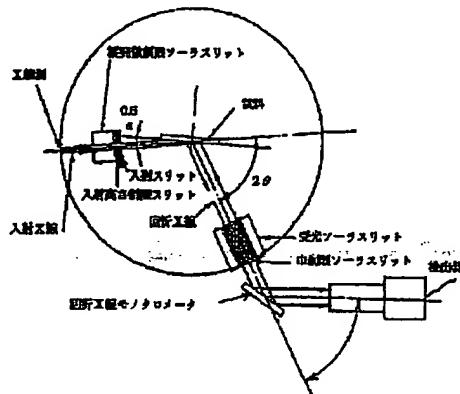
TAKAHASHI SHINJI

**(54) AUSTENITIC STAINLESS STEEL FOR FORMING
PASSIVE FILM AND FORMATION OF PASSIVE
FILM**

(57) Abstract

PURPOSE: To provide an austenitic stainless steel for forming passive films; and a method for forming the passive films capable of surely forming the oxidation passive films essentially consisting of chromium oxide which does not contain an iron-component.

CONSTITUTION: The steel which is $^{>}4/100$ in the intensity ratio (I_2/I_1) of the intensity value (I_1) of the max. peak detected in a range from 42 to $<44^\circ$ of a diffraction angle 2θ ; of diffraction X-rays at the extreme surface and the intensity value (I_2) of the max. peak detected in a range from 44 to $<46^\circ$ is subjected to baking in an inert gas, by which moisture is removed from the surfaces of the stainless steel. This stainless steel is then subjected to a heat treatment at 300 to 600°C in a gaseous mixture atmosphere composed of the inert gas and 500ppb to 2% gaseous H_2O , by which the oxidation passive films essentially consisting of the chromium oxide which does not substantially contain the iron component are formed at least at $^{>}1.5\text{nm}$ from the extreme surface.



COPYRIGHT: (C)1995,JPO